

## Curriculum Vitae

### STEVE Istvan LONHART

Monterey Bay National Marine Sanctuary  
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#### EDUCATION

- 2001 Ph.D. Biology **University of California Santa Cruz.** Department of Ecology and Evolutionary Biology. “An invasive whelk as predator and prey: the ecology of *Kelletia kelletii* in Monterey Bay, California.”  
Advisor: Dr. Donald C. Potts
- 1996 M.S. Biology **California State University Long Beach.** Department of Biological Sciences. “Vertical distribution and diel migration of *Norrisia norrisi* on *Macrocystis pyrifera* at Santa Catalina Island, CA.”  
Advisor: Dr. Alan C. Miller
- 1990 B.S. Biology **University of California Los Angeles.** Department of Biology. Independent research: Gut content analysis of flashlight fish.  
Advisor: Dr. James Morin

#### POSITIONS

- 2002– **Monterey Bay National Marine Sanctuary** Senior Scientist, Sanctuary Integrated Monitoring Network (SIMoN), NOAA
- 2002– **University of California Santa Cruz** Institute of Marine Sciences, Research Associate
- 2002 **University of California Santa Cruz** Department of Ecology and Evolutionary Biology, Lecturer
- 2001-2002 **University of California Santa Cruz** Department of Ecology and Evolutionary Biology, Course Assistant

#### PUBLICATIONS

- Lonhart, S.I. 2009. Natural and climate change mediated invasions. *In*: G. Rilov, J.A. Crooks (eds). Biological Invasions of Marine Ecosystems: Patterns, Effects, and Management. Ecological Studies 204, Springer-Verlag Berlin Heidelberg. p 57-69.
- Ritter, A.F., K. Wasson, S.I. Lonhart, R.K. Preisler, A. Woolfolk, K.A. Griffith, S. Connors, K.W. Heiman. 2008. Ecological signatures of anthropogenically altered tidal exchange in estuarine ecosystems. **Estuaries and Coasts**, 31:554-571
- Zacherl, D., S.D. Gaines, and S.I. Lonhart. 2003. The limits to biogeographical distributions: insights from the northward range extensions of the marine snail, *Kelletia kelletii* (Forbes, 1852). **Journal of Biogeography**, 30: 913-924

Lonhart, S.I. and Tupen, J.W. 2001. Recent range extensions of 12 marine invertebrates: the role of El Niño and other mechanisms in southern and central California. **Bulletin of the Southern California Academy of Sciences**, 100(3): 238-248

#### Edited Proceedings

Paduan, J., S. Benson, K. Bruland, F. Chavez, D. Costa, D. Croll, A. DeVogelaere, C. Edwards, G. Griggs, C. King, R. Kudela, J. Harvey, B.L. Lipphardt, S. Lonhart, P. Mantey, B. Marinovic, M. McManus, L. Rosenfeld, M. Silver, and J. Vesecky. 2005. Ocean observing and modeling system developments around Monterey Bay. California and the World Ocean '02: revisiting and revising California's ocean agenda. Proceedings of the Conference, October 27-30, 2002 Santa Barbara, California, eds. O.T. Magoon, H. Converse, B. Baird, B. Jines and M. Miller-Henson. Pages 967-976.

Lonhart, S.I. 2000. Diel vertical migration of *Norrisia norrisi* on *Macrocystis pyrifera*. Proceedings of the Fifth California Islands Symposium. US Department of the Interior, Minerals Management Service, Pacific OCS Region. Pages 382-389

Lonhart, S.I. 1999. Multiple techniques for marking subtidal marine mollusks. Proceedings of the American Academy of Underwater Sciences Nineteenth Annual Scientific Diving Symposium, eds. J. N. Heine, D. Canestro and G. Wuttken. American Academy of Underwater Sciences. Pages 67-70

#### Other Publications

Lonhart, S.I. 2001. The impact of native predators on an invasive whelk: sea otters and seashells by the seashore. World Congress of Malacology 2001, eds. Luitfried Salvini-Plawen, Janice Voltzow, Helmut Sattmenn and Gerhard Steiner. Vienna: UNITAS Malacologica. Page 198. [Abstract]

Lonhart, S.I. 2001. Populations and growth estimates of an invasive whelk using mark-recapture techniques. World Congress of Malacology 2001, eds. Luitfried Salvini-Plawen, Janice Voltzow, Helmut Sattmenn and Gerhard Steiner. Vienna: UNITAS Malacologica. Page 199. [Abstract]

Lonhart, S.I. 2001. An invasive whelk as predator and prey: the ecology of *Kelletia kelletii* in Monterey Bay, California. Ph.D. dissertation, UC Santa Cruz. 114 pages

Lonhart, S.I. 2000. Effectiveness of functional feeding mode of invasive and native predators. Marine Bioinvasions: proceedings of a conference, January 24-27, 1999, ed., Judith Pederson. Massachusetts Institute of Technology, MIT Sea Grant College Program, Cambridge, MA. Pages 414-415. [Abstract]

Lonhart, S.I. 2000. Growth rate of *Norrisia norrisi* in a kelp forest at Santa Catalina Island. Proceedings of the Fifth California Islands Symposium. US Department of the Interior, Minerals Management Service, Pacific OCS Region. Pages 735-736

Lonhart, S.I. 1998. Feeding mode mediates success of invasive whelk. 1998 World Congress of Malacology, eds. Rudiger Bieler and Paula M. Mikkelsen. Chicago: Field Museum of Natural History. Page 195. [Abstract]

Lonhart, S.I. 1998. Growth measurements of *Norrisia norrisi* (Sowerby, 1838) in a kelp forest at Santa Catalina Island, California. 1998 World Congress of Malacology, eds. Rudiger Bieler and Paula M. Mikkelsen. Chicago: Field Museum of Natural History. Page 196. [Abstract]

Lonhart, S.I. 1996. Vertical distribution and diel migration of *Norrisia norrisi* on *Macrocystis pyrifera* at Santa Catalina Island, CA. Master's Thesis, CSU Long Beach. 103 pages

#### **INVITED SPEAKER**

- 2009 American Cetacean Society, Monterey Bay Chapter  
Characterization of rocky intertidal and kelp forest habitats along the Big Sur coast
- 2008 Invasive Seaweeds Control Workshop  
Monitoring and management of the Asian kelp *Undaria pinnatifida* in Monterey Harbor
- 2008 Moss Landing Marine Laboratories Seminar Series  
Dynamics of marine geographic ranges: the role of characterization and monitoring programs
- 2008 American Fisheries Society, California/Nevada 42<sup>nd</sup> Annual Conference  
Monitoring and management of the invasive Asian kelp *Undaria pinnatifida* in Monterey, CA
- 2007 Immersion Presents Annual Sites Conference  
Keynote Speaker  
An overview of the Sanctuary Integrated Monitoring Network (SIMoN)
- 2005 Establishing a research agenda for introduced seaweeds  
Workshop at California State University, Fullerton  
Monitoring and management of the Asian kelp *Undaria pinnatifida* in Monterey Harbor
- 2002 Western Society of Malacologists: Ecology Symposium  
Strangers in a strange land: what are we learning from biological invasions?
- 1999 University of California Santa Cruz Annual TA Development Conference  
"Collaborative Problem Solving in the Sciences" Workshop (also in 1998)

## **AWARDS and HONORS**

- 2009 Innovation of the Year Award, Office of National Marine Sanctuaries
- 2009 Bronze Medal, U.S. Department of Commerce: COSCO BUSAN oil spill response
- 2001 Southern California Academy of Sciences Annual Meeting. Best Student Paper
- 1999 Western Society of Naturalists. Best Student Paper in Community and Applied Ecology
- 1999 American Malacological Society Annual Meeting. Outstanding Student Poster
- 1999 Southern California Academy of Sciences Annual Meeting. Best Student Paper
- 1999 Monterey Bay National Marine Sanctuary Symposium. Best Overall Poster
- 1998 Southern California Academy of Sciences Annual Meeting. Best Student Paper
- 1997/98 Outstanding Teaching Assistant Award, Department of Biology, UCSC
- 1997 American Malacological Union and Western Society of Malacologists Joint Meeting Co-Winner Best Student Paper
- 1996 Summa Cum Laude CSULB (4.0 GPA)
- 1995 Graduate Dean's List of University Scholars and Artists, CSULB
- 1990 Dean's Honors List, Spring, UCLA

## **PROFESSIONAL SERVICE**

### Journal Reviewer

Aquatic Biology  
Biological Invasions  
Estuarine, Coastal and Shelf Science  
ICES Journal of Marine Science  
Marine Ecology Progress Series  
Marine Environmental Research  
Marine and Freshwater Research  
Palaeogeography, Palaeoclimatology, Palaeoecology

### Research Grant Reviewer

NOAA's Undersea Research Program (NURP)  
National Science Foundation (DEB—Population Biology)  
University of Alaska Fairbanks Pollock Conservation Cooperative Research Center

### Affiliations

American Academy of Underwater Scientists 1996-  
American Fisheries Society 1997-2001  
Ecological Society of America 1999-2002  
National Invasive Species Council, Prevention Committee member 2004-2005  
Sigma Xi Associate Member 1996-2001  
Southern California Academy of Sciences 1998-2007  
Western Society of Naturalists 1997-  
Western Society of Malacologists 1998-, Treasurer 2003-2007

## **UNIVERSITY SERVICE**

- 2007- UCSC Diving Control Board. NOAA Representative
- 1997-2001 UCSC Diving Control Board. Graduate Student Representative
- 1992-1993 CSULB Diving Control Board. Graduate Student Representative

#### Invited Lectures in University of California courses

- 2009 Kelp Forest Ecology (Biol 161). Invertebrate ecology
- 2007 Kelp Forest Ecology (Biol 161). Invertebrate ecology
- 2004 Community Ecology (Biol 152). Biological invasions
- 2004 Marine Conservation Biology (Biol 163). Marine research and management
- 2003 Kelp Forest Ecology (Biol 162). Invertebrate ecology and trophic interactions
- 2002 Kelp Forest Ecology (Biol 162). Apparent competition, alternative stable states
- 2001 Community Ecology (Biol 152). Biological invasions
- 1998 Concepts in Biology (Biol 3). Protein synthesis
- 1997 Invertebrate Zoology (Biol 150). Gastropoda form and function
- 1996 Kelp Forest Ecology (Biol 162). Invertebrate meso-predators

#### Invited Lectures at Other Universities

- 2009 NOAA policy on marine aquaculture. Moss Landing Marine Laboratories.
- 2003 Introduced species and the MBNMS. Moss Landing Marine Laboratories.

#### **RESEARCH GRANTS, FELLOWSHIPS, SCHOLARSHIPS**

- 2005 NOAA Award No. NA05NMF4631018
- NOAA Community-based Restoration Program. \$52,624
- 2001 American Society of Malacologists Student Travel Grant. \$500
- 2001 UNITAS Malacologia Student Travel Grant. EU 500.
- 2000 Conchologists of America Grants to Malacology. \$250
- 1998 University Research Expeditions Program. \$700
- 1998 Conchologists of America Grants to Malacology. \$730
- 1998 Sigma Xi Grants-in-Aid of Research. \$700
- 1998 Hawaiian Malacological Society Student Scholarship Grant. \$1000
- 1998 Lerner-Gray Fund for Marine Research, American Museum of Natural History. \$1000
- 1998 Western Society of Malacologists Travel Grant. \$250
- 1997 Myers Oceanographic and Marine Biology Trust Research Grant. \$1400
- 1997 Friends of Long Marine Laboratory Student Research Grant. \$225
- 1996 PADI Foundation Research Grant. \$2050
- 1996 Myers Oceanographic and Marine Biology Trust Research Grant. \$750
- 1996 Friends of Long Marine Laboratory Student Research Grant. \$200
- 1995 Myers Oceanographic and Marine Biology Trust Research Grant. \$750
- 1995 Friends of Long Marine Laboratory Student Research Grant. \$318

#### *Intramural (UCSC/CSULB)*

- 1998 Graduate Students Association, UCSC. Travel Grant. \$65
- 1998 Department of Biology Summer Fellowship, Student Research. \$3300
- 1998 Organismal and Population Biology Graduate Advisory Committee, UCSC Biology Travel Grant. \$500
- 1998 GAAN Fellowship, Winter Quarter 1998. \$5240
- 1997 Biology Independent Study, Organismal and Population Biology Graduate Advisory Committee, UCSC. \$536
- 1997 Graduate Students Association, UCSC. Travel Grant. \$122
- 1997 GAAN Fellowship, Spring Quarter 1997. \$5030

- 1997 Department of Biology Summer Fellowship, Student Research. \$3150  
 1996 Biology Independent Study, Organismal and Population Biology Graduate  
 Advisory Committee, UCSC. \$500  
 1996 Department of Biology Summer Fellowship, Student Research. \$3000  
 1995 Department of Biology Summer Fellowship, Student Research. \$3440  
 1995 Biology Independent Study, Organismal and Population Biology Graduate  
 Advisory Committee, UCSC. \$500  
 1992 Department of Biology Grant, CSU, Long Beach. \$120  
 1992 Richard B. Loomis Award, CSU, Long Beach. \$500

## TEACHING EXPERIENCE

- 2002 Lecturer . **University of California Santa Cruz** Department of Ecology and  
 Evolutionary Biology  
 Experimental Lab (Biol 20L)  
 2001–2002 Course Assistant. **University of California Santa Cruz** Department of Ecology  
 and Evolutionary Biology  
 Marine Ecology (Biol 160)  
 Kelp Forest Ecology (Biol 161/161L)  
 Community Ecology (Biol 152)  
 Development and Physiology (20B)  
 1993–2001 Teaching Assistant. **University of California Santa Cruz** Department of  
 Ecology and Evolutionary Biology  
 Ecology and Evolution (Biol 20C)—4x  
 Accelerated Development and Physiology (Biol 21B)  
 Microbiology (Biol 119)  
 Concepts in Biology (Biol 3)  
 Invertebrate Zoology (Biol 150/L)—2x  
 Kelp Forest Ecology (Biol 161/L)—3x  
 Bioenergetics (Biol 127)—2x  
 Ecology (Biol 160/L)  
 Cell and Molecular Biology (Biol 1B)  
 Structure and Function of Organisms (Biol 1C)  
 1992–1993 Teaching Assistant. **California State University Long Beach** Department of  
 Biology  
 General Biology (non-majors)—2x  
 Biological Science II (Botany)  
 Biological Science I (Zoology)

## CONTRIBUTED PAPERS at PROFESSIONAL MEETINGS (Selected)

- 2009 Western Society of Naturalists Annual Meeting  
 Coming to a harbor near you: the invasive Asian kelp *Undaria pinnatifida*  
 2008 Western Society of Naturalists Annual Meeting  
 Response of estuarine communities to altered tidal exchange in Elkhorn Slough

- 2007 Western Society of Naturalists Annual Meeting  
Geographic range changes by chitons in the Panamic Province
- 2006 Western Society of Naturalists Annual Meeting  
Predicting intertidal and subtidal communities along the Big Sur coastline: the value of quantitative and qualitative data
- 2005 Western Society of Naturalists Annual Meeting  
Subtidal marine resource surveys along the Big Sur coastline
- 2004 Western Society of Naturalists Annual Meeting  
The Asian kelp *Undaria pinnatifida* in Monterey Harbor and its probable spread to the open coast
- 2003 Western Society of Naturalists Annual Meeting  
Status of the invasive alga *Undaria pinnatifida* in Monterey Harbor
- 2003 International Conference on Marine Bioinvasions  
An integrated response to a new coastal invasion: monitoring and managing *Undaria pinnatifida* in Monterey Bay
- 2002 Western Society of Naturalists Annual Meeting  
The Sanctuary Integrated Monitoring Network (SIMON): a new program at the Monterey Bay National Marine Sanctuary
- 2001 Second Symposium on Marine Conservation Biology  
The impact of native predators on an invasive whelk: sea otters and seashells by the seashore.
- 2001 Annual Meeting of the Southern California Academy of Sciences  
The impact of native predators on an invasive whelk: sea otters and seashells by the seashore.  
**Best Student Paper** in Ecology and Evolution.
- 1999 Western Society of Naturalists Annual Meeting  
Mechanisms influencing recent range extensions of marine species--alternatives to global warming.  
S. I. Lonhart<sup>1\*</sup> and J. W. Tupen<sup>2</sup>. <sup>1</sup>Dept. of Biology, UC Santa Cruz. <sup>2</sup>Tenera Energy, LLC. Avila Beach, CA. **Best Student Paper**.
- 1999 Ecological Society of America Annual Meeting  
Feeding preferences of invasive and native turban snail predators.
- 1999 9th International Zebra Mussel and Aquatic Nuisance Species Conference  
Comparing prey preferences and consumption rates of an invasive whelk and native sea stars.

- 1999 5th California Islands Symposium  
Diel vertical migration of *Norrisia norrisi* on *Macrocystis pyrifera*.
- 1999 National Conference on Marine Bioinvasions  
Effectiveness of functional feeding modes of invasive and native predators.
- 1998 World Congress of Malacology  
Feeding mode mediates success of invasive whelk

## RESEARCH EXPERIENCE

- 2007- Chief Science Officer for R/V *Fulmar* Cruises  
Baseline monitoring of newly established MPAs in central coast region
- 2003-05 Chief Science Officer for R/V *Shearwater* Cruises  
Marine resource surveys of landslides along the Big Sur coastline
- 2002- Management of the invasive alga *Undaria pinnatifida* in Monterey Harbor  
Removal of the alga, demographic data collection, mapping spread
- 2001 Dive assistant to collect and process coral samples for genetic analyses  
University of California Berkeley Gump Station on Moorea, Tahiti
- 1999- Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO)  
Subtidal surveys of invertebrates and algae in central California kelp forests.
- 1998 Taxonomic Consultant for Applied Marine Sciences  
Point Reyes Scrape Samples: identification of intertidal invertebrates.
- 1996 Survey of nearshore kelp forests along the Big Sur coastline. UCSC, Monterey  
Bay National Marine Sanctuary and Oceanic Society joint research cruise on the  
R/V *Ballena*
- 1995 Survey of offshore pinnacles along the Big Sur coastline. UCSC, Monterey Bay  
National Marine Sanctuary and NOAA joint research cruise on the R/V *McArthur*.
- 1995-97 Core sample analysis: mollusk sorting and identification. UCSC, Monterey Bay  
National Marine Sanctuary and NOAA joint research cruise on the R/V *McArthur*.
- 1992 Diversity and distribution of holothuroids on Coconut Island, Kaneohe Bay, Oahu,  
Hawaii (Student research, CSULB)
- 1991 Density and distribution of *Olivella biplicata* in San Pedro Harbor (Student  
research, CSULB)  
Otolith study of queenfish (*Seriphus politus*) from southern California (Student  
research, CSULB)
- 1990 Gut content analysis of a tropical flashlight fish (Senior independent research,  
UCLA)
- 1990 Distribution, population biology and genetics of *Linckia columbiae* in southern  
California (Research Assistant to Dr. F. McAlary, Wrigley Marine Science Center)
- 1990 Population size and distribution of *Hemisquilla ensigera californiensis*, Santa  
Catalina Island (Volunteer researcher for Channel Islands Research Project)
- 1990 Channel Islands Kelp Forest Monitoring Project (Volunteer researcher)